

ABSTRACT OF THE DISCLOSURE

A main shaft includes a plurality of elastic engagement pieces arrayed along an outer perimeter of an attachment hole. During and after assembly, the elastic engagement pieces elastically abut at least an outer surface of a tapered shank in a tool holder and deform slightly in a radial direction. The elastic engagement pieces provide uniform engagement force between the main shaft and the tool holder over a broad surface area. An elastic flange provides additional elastic engagement and easy separation from the main shaft. Together, the elastic engagement pieces and elastic flange reliably engage and securely attach the main shaft to the tool holder while aiding disengagement.